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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,005	12/08/2003	Toshiyasu Shirasuna	03500.015546.1	9109

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EXAMINER

CROWELL, ANNA M

ART UNIT	PAPER NUMBER
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1763

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/729,005

Applicant(s)

SHIRASUNA ET AL.

Examiner

Michelle Crowell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of Group I, claims 12-13 in the reply filed on January 10, 2005 is acknowledged.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 12-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 12 requires an impedance regulation means in each reactor and in the high-frequency power supply means. The specification fails to disclose this feature. On page 22, lines 5-7 of the specification and Figure 5, the specification and drawing support that the matching circuit units 101U, 151U, 161U are provided on the side of the movable reactor section 104, 154, 164 and not within the movable reactor section. Likewise, as seen in Figure 5, the matching device 112' is located on the side of the high frequency power supply means 111 and not within the movable reactor section.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamura et al. (Japanese Patent Publication 11-319546) in view of Turlot et al. (U.S. 5,515,986).

Referring to Drawing 1, the abstract, and paragraph [0007], Okamura discloses a plasma treatment apparatus comprising a plurality of reactors 1100 each an evacuable inside where at least one treatment substrate 1107 is set in; a high frequency power means 1111 for supplying high-frequency power into each reactor having been inside-evacuated, to cause glow discharge to take place in the reactor, wherein each of the reactors and the high-frequency power supply means are provided separably; an impedance regulation means 1110 to regulate impedance between each reactor and the high-frequency power supply means; and a moving means 1104 for moving the reactors.

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Okamura et al. fail to teach impedance regulation means that regulates impedance spaced in each reactor and in the high frequency power supply means.

Referring to Figures 2a-2d, column 3, line 60 –column 4, line 20, and column 6, line 62-column 7, line 21, Turlot et al. teaches a plasma treatment apparatus having an impedance regulation means that regulates impedance spaced in each reactor 1 and in the high frequency power supply means. By using an impedance regulation means that regulates impedance spaced in each reactor and in the high frequency power supply means, the process conditions may be adjusted for each reactor (col. 7, lines 2-9). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to provide the reactors of Okamura et al. with the impedance regulation means as taught by Turlot et al. in order to adjust the process conditions for each reactor.

With respect to claim 13, Okamura et al. discloses that the substrate is an electrophotographic photosensitive member (abstract and par.[0007]). Additionally, it should be noted that the type of substrate (i.e. electrophotographic photosensitive member) used in apparatus claims is not given patentable weight (In re Young, 75 F.2d 996, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963))).

### ***Response to Arguments***

3. Applicant's arguments filed January 10, 2005 have been fully considered but they are not persuasive.

Applicant has argued that Turlot fails to disclose separate reactors and high-frequency

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power supply means, a moving means for moving the reactors or a plurality of reactors having impedances different from each other, and that an impedance regulation means is provided in each movable reactor.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, teaches 231 USPQ 375 (Fed. Cir. 1986). In the instant application, Okamura et al. discloses separate reactors and high-frequency power supply means, a moving means for moving the reactors or a plurality of reactors having impedances different from each other, and that an impedance regulation means is provided to the movable reactor. Turlot was applied for the teaching of an impedance regulation means provided in each reactor. Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **an impedance regulation means is provided in each movable reactor**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Currently, claim 12 only requires that an impedances regulation means regulates the impedances ( i.e. **adjust the capacitor or inductor for each reactor and not provide a separate and physical capacitor, inductor, or matching circuit for each reactor in each reactor and in the high frequency power supply means.** ) Claim 12 fails to require that an impedance regulation means is provided in each movable reactor. Thus, the combination of Okamura et al. in view of Turlot satisfies the claimed requirement.

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Applicant has argued that in Turlot, when reactors having different impedances are used, matching adjustment is needed each time. In contrast, according to the present invention, when the reactors having different impedances are used, matching adjustment is not needed every time. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **when the reactors having different impedances are used, matching adjustment is not needed every time.**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, page 21, line 14-page 22, line 10 of the specification fails to support applicant's argument that when the reactors having different impedances are used, matching adjustment is not needed every time. Thus, the combination of Okamura et al. in view of Turlot satisfies the claimed requirement.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Crowell whose telephone number is (571) 272-1432. The examiner can normally be reached on M-F (9:30 -6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on (571) 272-1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMC *ame*  
04-07-05

*p-h*  
PARVIZ HASSANZADEH  
SUPERVISORY PATENT EXAMINER